

Patent Claims

Sub 1
5 1. An edible shaped body in the form of a flat or tubular film based on plastifiable biopolymers or cleavage products or derivatives thereof and/or synthetic polymers of natural monomers is produced by a process having the following stages:

- 10 a) mixing the biopolymers, cleavage products or derivatives thereof and/or the synthetic polymers with at least one edible plasticizer, at least one lubricant and at least one crosslinker,
- 15 b) melting the resultant mixture to give a thermoplastic mass,
- c) extruding this mass and
- 20 d) calendering and/or stretching or blowing the product obtained from the extrusion to give the edible shaped body.

2. The shaped body as claimed in claim 1, wherein the plastifiable biopolymer, the likewise plastifiable cleavage products produced therefrom and/or the plastifiable synthetic polymer is thermoplastic starch, a starch derivative, an extrudable natural protein, casein or a casein derivate, chitin, chitosan, alginic acid, alginate, carrageenan, dextran, galactomannan, pectin or polylactic acid.

Sub 3
30 3. The shaped body as claimed in claim 1 or 2, wherein the content of plastifiable biopolymer, cleavage products and derivatives thereof and synthetic polymers of natural monomers is from 10 to 90% by weight, preferably from 15 to 80% by weight, in each case based on the total weight of the shaped body.

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claim 1
4. The shaped body as claimed in ~~one or more of claims 1 to 3~~, wherein the plasticizer is glycerol, diglycerol, sorbitol, sorbitol ester, triglycol or

carboxymethylcellulose.

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5. The shaped body as claimed in ^{claim 1} ~~one of more of claims 1 to 4~~, wherein the content of plasticizer(s) is from 0.5 to 50% by weight, preferably from 2 to 25% by weight, in each case based on the total weight of the shaped body.

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- 10 6. The shaped body as claimed in ^{claim 1} ~~one or more of claims 1 to 5~~, wherein the lubricant is a vegetable oil, preference being given to sunflower seed oil, rapeseed oil, olive oil and poppyseed oil, or a lecithin, triethyl acetylcitrate, a sucrose ester, a lactone, a lactam or a synthetic triglyceride.

- 15 7. The shaped body as claimed in ^{claim 1} ~~one or more of claims 1 to 6~~, wherein the content of lubricant(s) is from 2 to 30% by weight, preferably from 5 to 20% by weight, in each case based on the total weight of the shaped body.

- 20 8. The shaped body as claimed in ^{claim 1} ~~one or more of claims 1 to 7~~, wherein the crosslinker is caramel, a wood smoke concentrate, a sugar aldehyde, a dialdehyde, a dicarboxylic acid, a dicarboxylic anhydride, a di- or triisocyanate, a di- or triepoxide or a polysaccharide aldehyde.

- 30 9. The shaped body as claimed in ^{claim 1} ~~one or more of claims 1 to 8~~, wherein the content of crosslinker(s) is from 0.2 to 30% by weight, preferably from 0.5 to 25% by weight, in each case based on the total weight of the shaped body.

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- 35 10. The shaped body as claimed in ^{claim 1} ~~one or more of claims 1 to 9~~, wherein it comprises fibers, preferably woodpulp fibers or cotton linters.

11. The shaped body as claimed in claim 10, wherein the

woodpulp fibers have a length of from 0.2 to 5 mm, preferably from 0.5 to 2 mm.

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12. The shaped body as claimed in claim 10 or ~~11~~, wherein the content of fibers is from 2 to 30% by weight, preferably from 5 to 20% by weight, in each case based on the total weight of the shaped body.

13. The shaped body as claimed in ^{claim 1} ~~one or more of claims 1 to 12~~, wherein it comprises pigments.

14. The shaped body as claimed in ^{claim 1} ~~one or more of claims 1 to 13~~, wherein its thickness or wall thickness is from 20 to 120 μ m, preferably from 30 to 60 μ m.

15. The shaped body as claimed in ^{claim 1} ~~one or more of claims 10 to 12~~, wherein it includes three layers and only the central layer comprises fibers.

16. The shaped body as claimed in ^{claim 1} ~~one or more of claims 1 to 15~~, wherein it is post-hardened.

17. The use of the shaped body as claimed in ^{claim 1} ~~one or more of claims 1 to 16~~ for packaging foods, preferably meat or sausage products, particularly preferably as a seamless sausage casing.

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